

## **ABSTRACT**

A portable hydro-generator, for the generation of power, including a tower (10) filled with a driving fluid, a semi-sealed curved tubular housing with a drive portion and a return portion primed with a fluid, the drive portion having a larger diameter than the return portion, an inlet to allow the fluid to enter the tubular housing, a plurality of paddles to harness the kinetic energy of the fluid entering the curved tubular housing, a linkage assembly to link the plurality of paddles, a drive chamber, a sprocket within the drive chamber to engage a portion of the paddles, and an output power generator attached to the sprocket. A paddle adapted to be used in the hydro-generator include a top surface, a bottom surface, seals to prevent water leakage through the paddles, a linkage bar to allow an attachment of the paddle to subsequent paddle, wherein the top surface of the paddle further includes studs to increase the effective surface area of the top of the paddle.